

CHAPTER 14

Activating the Bases Deactivating the Project

November 1981–August 1982

I guess I have spent more time, got more white hairs, lost my temper more times on this damn money issue than any other issue.

Brig. Gen. John F. Wall, May 1982¹

There is no question that we have had quite a disagreement on the cost management . . . between the Corps of Engineers and this office.

Brig. Gen. Paul T. Hartung, May 1982²

Whenever you get into a close down operation and people are changing jobs, the anxiety level goes up.

Col. John E. Moore, Deputy Project Manager³

The autumn of 1981 was marked by an uneasy combination of achievement and disappointment. The schedule would be met. Of that, there was little question. However, money issues loomed ever larger, became more time consuming and sensitive, and left little time to savor accomplishments. The likelihood of an overrun was becoming more apparent to Wall. In addition, tensions among the managers increased as the project neared the financial brink several times, and Hartung and Wall confronted one another over the final cost and how it would be paid. Even before 25 October and joint occupancy, Hartung and Wall skirmished over a budget increase. Early in the month Wall told Hartung that planning would be based on an estimated completion cost of \$1.077 billion, which was in line with the August estimating team's figure. He also alerted the program manager that the project would run out of money and exhaust its authority to obligate funds in January. Without an infusion of funds by 30 November, the contractors would have to begin demobilization.⁴

Otherwise, Wall considered several possibilities. These included deobligating money from the Management Support Associates contract and diverting it or portions of the program management budgets to the construction contracts. He also considered using unpaid contractor fees to keep the work going. "These are all," Lt. Col. Steven West of Wall's staff conceded, "extremely drastic actions." They were also unacceptable, so 30 November loomed as "a critical milestone." The real choices, which rested with the Ministry of Defense, came down to providing the money or reducing project scope.⁵

Hartung disagreed with the assessment on which these choices hinged. He still believed that "the funding deficit of \$40 million . . . may be exaggerated, at least at this time," but recognized that some extra money might be needed. Until he was satisfied with Wall's figures and could use them as a basis for convincing the Israelis to put more money in the job, he held fast to a final cost estimate of \$1.008 billion. "John," he told Wall, "I'm convinced you can manage this thing within the money as long as you stay hard nosed." For Hartung, the question centered on the validity of the obligations anticipated by Wall. For example, all of Wall's estimates for the three prime contracts contained some costs that were likely to be disallowed or suspended. Hartung estimated the amount likely to be withheld at \$4.1 million. He also cited what he viewed as an overestimate of \$2.8 million in the support contract: fifty-nine jobs for which return air fare and shipment of household goods to the United States had been budgeted had been filled with people hired in Israel. Overall, he thought Wall's figures had too many estimates of what might happen—contingencies—rather than obligations for which funding had to be provided.⁶

If more money did prove necessary, Hartung did not want to give it to Wall in one sum. He and Bar-Tov thought that any additional need would be for less than \$40 million. Ma'ayan was also reluctant to accept Wall's figures without concurrence by the program managers and agreed to provide more money only on an incremental basis. Hartung, who had long been frustrated by his lack of control over funds, was comfortable with this position. With an air of finality, he reported that "additional 'dependable undertaking' as determined to be required will be provided on an incremental basis as MOD does not want excessive obligation authority to pass directly to the construction agent as has been done in the past."⁷

There was another reason for the Israeli desire to fund the rest of the project incrementally. Although the initial government-to-government agreement obligated Israel to pay all of the bills beyond the American grant of \$800 million, the Israeli portion ulti-

mately came from money borrowed from the United States. Incremental allocations to the air base project stretched out the loans and minimized their interest payments.⁸

As of early November Wall remained adamant about the need for more money. If he did not get it by the end of the month, he would be unable to prevent the diversion of contractor resources to demobilization planning. The disagreements with Hartung over what constituted an obligation could be worked out, but right now he needed money. He opposed incremental funding as an impediment to planning. However, he was willing to take \$30 million rather than the \$40 million he thought he needed to finish. With careful management and detailed monthly reviews, he would try to reduce costs wherever possible.⁹

A few days later Wall again reduced the amount. In response to Hartung, he cut his immediate request to \$23.5 million. Later, he would in all likelihood need more. According to Wall, Hartung had to decide "whether or not it is politic to go only once to the well—to GOI and DSAA—or to do so a number of times." The program managers had held back from officially notifying the Defense Security Assistance Agency of an impending overrun. The agency would likely take a month to provide the money Wall needed in three weeks. "It appears to me," Wall wrote, "that time is of the essence." As far as incremental funding was concerned, he remained firmly opposed. Bratton supported Wall, reminding General Gilbert of the Air Force that the agreement between the governments did not mention such an arrangement and specified only that funds would be made available as needed. The original \$800 million had been given to the Corps in one sum; the remaining need should be filled the same way—and soon, Bratton added, stressing "the critical requirement for additional authority well before 30 November 1981."¹⁰

Hartung misunderstood Wall's position. He interpreted Wall's willingness to reduce the sum he wanted as acceptance of increments. Working from this assumption, Hartung proposed a few small adjustments in the program budget and a total additional sum of \$26 million, issued to the project in four installments, at the end of November, then again in December, January, and March. Such an arrangement, he claimed, would provide the chance to determine adjustments monthly.¹¹ It also would give him the control that he had sought from the beginning.

Wall's clarification of his position crossed Hartung's proposal in the office mail. Wall insisted that "the money should be given the project in accordance with what I understand the MOU between the USAF and USACE states." He had cut his request as Har-

tung and Air Force Lt. Gen. James H. Ahmann, the new head of Defense Security Assistance Agency, had asked. Still, he reminded Hartung, "I am not in favor of any plan to incrementally distribute the additional funds required." Wall saw that a confrontation over this issue was likely and sought a way to resolve the dispute. Hartung told him that the money was going to be provided in increments "or I won't be here." Wall insisted that he had to be told in writing that the money was on hand. He suggested a series of letters of credit from the Ministry of Defense—six at \$5 million each and five more of \$2 million each—which could be used as scheduled or necessary. This solution would guarantee availability of the money he needed and provide a dependable reservoir for obligation authority through closeout while honoring the Israeli desire to hold down interest payments.¹²

Hartung finally notified Bar-Tov's office of Wall's stated need for \$40 million. He still thought Wall's estimate contained "unquantifiable hidden contingencies" and that the plan for phasedown was "not as aggressive as it should be." Because of overstated needs due to these factors, Hartung thought Wall's estimate remained too high and that monthly adjustments of the funding plan would reduce the total. Meanwhile, incremental funding remained the answer. Wall's marginal notes on his copy of this letter to Bar-Tov—the sad face on the top, "B.S." several times and "not true" alongside the text—reflected his unhappiness and frustration. He knew he was far from a resolution to the impasse.¹³

On 19 November the three generals had a day-long session on the issue. Wall accepted \$19 million, which was more than the first increment of \$8 million that Hartung had offered and less than Wall's \$23.5 million compromise figure. The amount also matched West's expectations: in October he had anticipated that Wall would get his \$40 million less \$16 million contingencies and \$7 million for contract closeout. Hartung's claims that the phasedown plan was inadequate and that the estimate had "unquantifiable hidden contingencies" still bothered Wall, but he wanted to get past the squabbling. "I hope," he wrote after the meeting, "that the initial increment of our required funding is provided quickly and that our detailed re-evaluation of total requirements in December leads to reestablishment of synergistic relations between the DOD elements of the program."¹⁴

At the end of December the next round of financial talks started. Wall gave Hartung a schedule of his needs for the remainder of the project. By this time Wall tacitly had come to terms with incremental allocation and couched his needs accordingly. He wanted \$10 million by 1 February, \$6 million by 1 April, and an-

other \$6 million a month later. By then it was becoming clear that Wilson and Gilbert planned to send representatives to Israel for an independent analysis of the cost of the remaining work. For the moment Wall stood by his own staff's assessment.¹⁵

With the focus on finances, it was only a matter of time before another estimating team assessed the situation. Wilson planned to visit the program during the winter and wanted Wall's judgment of the final cost. Wall recommended that Wilson's own estimator, John Reimer, make the determination. "You should not," Wall recalled arguing, "believe me since Hartung feels so vehement about this. You send your guy over and put me to the test. Make me prove that I am right." Wilson wanted to know where the project stood, including the total cost of construction to date. He also asked the team to estimate the time, manpower, and money needed to finish the job, based on the Near East Project Office's phasedown plan.¹⁶

The team grew more complex, with representatives from the U.S. Air Force and Bar-Tov's office. Wilson told his engineering division to include both program management organizations. Bar-Tov, apparently ignorant of Wilson's desire for Israeli membership and unwilling to wait for an invitation, asked to participate. Neither Wall nor Hartung objected, and the composition of the team was set. At the outset, a truly joint effort appeared to be taking shape, with Reimer as chairman and team leader. If all went well, the team would resolve what Wall knew to be "deep-seated feelings and real disagreements on the cost issue." The Air Force contributed two members. The senior person was Charles K. Hudson, who was special assistant to Brig. Gen. Clifton D. Wright, the deputy director of engineering and services at Air Force headquarters. Hudson oversaw critical Air Force programs in Saudi Arabia, facilities for the MX missile, and the Israeli job. The other Air Force member, Maj. Edward L. Parkinson, ran the construction cost-management group in the Air Force Engineering and Services Center at Tyndall Air Force Base, Florida. Set up in the spring of 1981 along lines recommended by a committee under Hudson, Parkinson's office gave the Air Force an "in-house cost management/analysis capability to evaluate construction programs for new weapons and research facilities." This mission entailed provision of independent estimates and cost analyses of major long-term construction.¹⁷ As long as the Corps of Engineers acted as construction agent for the Air Force, this job essentially came down to second-guessing the Corps.

With the team assembling in Tel Aviv, Wall delayed asking for more authority to spend money. He gave Hartung a draft of a letter he intended to send him, pending Wilson's approval. Wall was will-

ing to accede to Hartung's "urgent request" and "take a risk and attempt to continue funding current construction up to 1 March within the present obligation authority." He had "a dangerously bare-boned plan," to get the project through until the estimators reported at the end of the month. Thereafter, if more money was not at hand, he faced having to start demobilization activities, a possibility which came up several times during that winter and spring.¹⁸

Unlike earlier estimates, this one left little room for imagination. Too much had already been done at the sites for that. Reimer's method of operation reflected the current situation. He worked independently of Wall's office, except when he had questions for the staff. His team looked at every building in every facility, noted remaining work, determined previous productivity on that kind of work, and made projections. As he put it, "We spent many hours walking through the buildings and making engineering analysis on work remaining to come up with the remaining man hours and equipment and the estimate that was prepared."¹⁹

Soon, the team began to unravel. Reimer and Hudson strongly disagreed about methodology. Reimer wanted to do the analysis as of 31 December 1981, while Hudson insisted that all disbursements be taken into account as made and the estimate be adjusted for each. Hudson also wanted to go beyond an estimate of resources needed to complete the job. He wished to assess the validity of earlier outlays and even determine which contractor costs might be disallowed. Perhaps seeking to show the lowest possible final cost, he wanted the estimate to reflect credits that would accrue at the end of the program. These awaited final adjustment of the costs of subcontracts and various refunds to the program, among them value-added taxes that had been paid on purchases in Israel, commissary profits, and workmen's compensation insurance rebates. The exact amount, Reimer insisted, could not be determined yet. Moreover, the money from these sources would not be available until after the job was done. So these sums could not be counted against the amount needed to finish.²⁰

The inability to reach a basic agreement frustrated Hudson as well as Reimer. Hudson and Parkinson finally abandoned the effort and went sightseeing in Jerusalem, while Reimer told Wall that "an impasse existed" and that the briefing scheduled for 1 February should be "either delayed or canceled." Wall asked Hartung to cancel the meeting. He shared Reimer's pessimism and his feeling that the Air Force had sent people who acted more like "management head hunters" than estimators. Without a consensus on method, mutually acceptable conclusions appeared unlikely. Wall

still hoped for an accommodation but was becoming convinced that "the joint team bit is impossible."²¹

The events of the next day confirmed Wall's view. Early on 2 February, while Reimer ate breakfast, Parkinson took some working papers out of Reimer's desk and file cabinet, and photocopied them. He packed much of what he took with other papers in a carton, addressed it to himself at Tyndall, and left it next-door at the Air Force post office for mailing to the United States. Meanwhile Reimer searched frantically for his notes, some of which Parkinson returned later in the morning without explanation. Lt. Col. Robert Amick, Wall's security officer, found the box at the post office. He called Hartung, who drove to the Palace from his office at the IBM Building, picked up the carton, and drove off. Later he returned some documents to Reimer. Wall and his staff never learned the exact contents of the box and did not know what—if anything—Parkinson sent to Tyndall. In any case, it was obvious that an estimate on which all parties could agree was no longer possible.²²

The episode raised two questions. One involved a possible breach of security. Wall believed that some of the papers that were taken, notably the Ovda contractor's monthly cost and man-hour printout, contained "somewhat sensitive information that required special handling." Bar-Tov expressed his "deep disappointment" with "the method and the quality of the work." However, the Israelis, who had an officer on the team, never voiced a concern regarding the pilfered documents. In fact, Wall's deputy, Col. John E. Moore, thought they viewed the matter mainly as "squabbling among the gringos."²³

The affair also highlighted the deterioration of relations between Hartung and Wall and their offices. Some of Wall's staff reacted angrily to the episode, which became known around the Palace as "Parkinson's disease." Moore considered Parkinson's approach "outside the team" but thought he acted more from excessive zeal than lack of principle. Others showed less understanding. Amick called the removal of the papers "a breach of ethics." Wall, who understood that Parkinson "had a lot of pressure from his mission and [Hartung] and others," still saw his actions as "gross and base." He asked Hartung, "If the situation had been reversed and an Army officer had acted as apparently did Parkinson, I wonder how seriously you would have viewed the situation?"²⁴

The Air Force did not view the matter as seriously as did Wall. After the incident, neither Parkinson nor Hudson took part in the analysis, although they stayed in Israel. On 6 February, when Reimer presented his estimate of \$1.086 billion, including \$10 million for contingencies, they were present, seated with Hartung's

staff. Wall decided against a formal protest and confined his expressions of outrage to his notes to Hartung. With a new sum corresponding closely to Reimer's August 1981 estimate and no progress toward a consensus on the numbers, the effort yielded only more mutual annoyance and suspicion. Only the Air Force Directorate of Engineering and Services' official history hinted, however obliquely, of the embarrassment that the episode represented for the Air Force. The semiannual volume produced while the team was in Israel mentioned the mission and their objective, "an agreed-upon program amount."²⁵ Later issues did not mention the group's existence, let alone its failure.

Soon after the team left, Wall's office again neared the financial brink. His financial staff maintained only fifteen days of reserve, which meant about \$10 million. On 10 February the money dwindled to only \$2 million—"on the thin edge," according to Wall—before urgent phone calls to Washington made an additional \$13 million available.²⁶

By this time, the problem was exacerbated by demands from the American embassy in the name of amicable American-Israeli relations. Tensions between the long-time friends were on the rise, as the prospect of a large Israeli military operation in Lebanon jeopardized the Camp David accords and the treaty with Egypt. Ambassador Lewis sought to keep the program from creating another—albeit minor—source of friction. With the financially strapped Ministry of Defense's fiscal year ending in March, he tried to defer the program's financial demands on Israel. He claimed it was not in the interest of the United States to ask for more money before the new accounting year. At a January meeting with Wall, Lewis was "extremely adamant," according to Griffis, about restraint. John Brown also recalled that Lewis exerted "tremendous pressure . . . to get past April 1."²⁷

Wall did his best to reach April without further payments, sometimes with substantial consequences for construction. At Ramon Griffis noted the threat to some completion schedules. "I hate that that's happening," he told his staff, "but the override decision-making criteria is the fact that we do not go to the Government of Israel before the 1st of March [*sic*] for any additional obligation authority. This requirement," he added, "overrides any other construction requirement."²⁸

During the austere time before the project obtained more money in April, help came from an unexpected source. Management Support Associates made available \$2 million that had been committed to its operation. Wall used some of the money to pay the construction contractors and later returned the entire amount

to the original account. Wall was unstinting in his praise: "The only reason I got to the first of April was because I deobligated funds from MSA, because they knew it was important to the program and to the government of Israel and to our nation and the ambassador." General Manager Shepherd was fiercely loyal to the project. "Under no circumstances," he declared, "would I ever put the project at jeopardy for selfish gain."²⁹

This extraordinary transaction owed a lot to Wall's support of Shepherd's beleaguered organization. Bar-Tov considered the firm "a big waste of money, period." Hartung agreed and in the fall of 1981 had recommended terminating the support contract. Wall took "strong exception" to Hartung's claim that a combination of temporary government employees from the United States and increased Ministry of Defense help would provide technical assistance and life support for less money. "I could not," he wrote Bratton, "disagree more with this scheme." Wall appreciated the contractor's flexibility and dedication and viewed any change at that time as distracting and time consuming. Moreover, the decision on the organization's future belonged to him, not to Hartung. Wall intended to win this battle and did. To make sure, he sent copies of his response to Hartung to Wilson, Bratton, Ahmann, and Deputy Chief of Mission William Brown at the embassy, all covered with personal notes. In March 1982, with the project on the financial brink, his loyalty to Management Support Associates paid great dividends.³⁰

Before the end of March Wall got an infusion of money for use during the following month. Hartung had recommended that no more than \$10 million be authorized. However, this increase in the dependable undertaking came to \$14 million, the sum Bar-Tov considered sufficient to carry the project into June. By that time, it was becoming clear that only one more payment would be necessary to finish.³¹

Hartung still maintained that the program could be finished for the original program amount. No argument by Wall or Bar-Tov could ever convince him that more money was really needed. Defense Contract Audit Agency's Maloney, whose formal audits persuaded him that even Wall and the contractors underestimated the cost of the job, never understood how the program manager's staff got its figures: "They just seemed to me . . . to have really no understanding of an accounting system." Nevertheless, Hartung persisted in the belief that tighter management was all that was necessary.³²

The financial situation greatly affected the whole operation. In the field, as Colonel Griffis had complained in February, cuts in manpower pushed back scheduled completion of some facilities.

But the most serious effect was felt in Tel Aviv, where management focused on "constantly fending off this financial disaster." This preoccupation came at the expense of cost reviews, such as analysis of the effectiveness of overtime. It also created the need for stringent control of current spending. For example, in early March Wall curbed the authority of the contracting officers still further. During the previous autumn, he had reduced their authority to approve purchases from a \$25,000 limit to \$1,000. Now he required his resource manager to certify the availability of funds before the contracting officers incurred even the smallest obligations. This bureaucratic control cost the program money, but just as important was the anxiety it produced. "When . . . you end up," Moore observed, "at the end of the month with \$158,000 in the till, when . . . every voucher that comes in is . . . in excess of several million, it tends to make a few of the folks a little uneasy."³³

At the end of April the project needed one more infusion of money. The job had started with the Near East Project Office in control of a vast sum and was ending with short-term drawdowns. While there was a general understanding that fast-track construction represented a state of flux, this change was unexpected. Nevertheless, by the spring the painful transition to incremental funding had been made.

Any time not spent walking the financial tightrope was devoted to phasedown, with reorganizations, changes, and reductions in personnel. In 1980 Bratton had instructed Wall to turn his attention to this matter. In addition, Wilson kept pressing for early completion of planning. "Austerity, control, and allocation," he told Wall at the end of September 1981, "must be the guiding principles." He wanted Wall's overall plan by the first of December but underscored the need to get the project out of the Palace as quickly as possible.³⁴

Earlier in 1981 Wall had brought Jack Clifton up from Ramon to develop a phasedown plan. Clifton tried to set up a flexible and orderly framework that tied phasedown to construction progress. His concept divided the effort into four periods. Phase I, involving peak construction, concurrent site activation, and gradual reduction in the work force, went from August 1981 through March 1982. In the next period, construction was finished; the project turned over property and facilities to the Israelis, consolidated functions, and significantly reduced personnel. At the end of phase II, in September 1982, the project personnel would leave Israel. The third period—audits, claims, reconciliations, and closeout in the United States—would last until June 1983. The final administrative closeout of the contracts in phase IV would be

decentralized to the offices of the contractors for conclusion by the end of 1983.³⁵

Clifton's replacement, Lt. Col. Leonard C. Gregor, made no major changes to the plan. With construction still not done, he found "too much uncertainty out there in the future as far as the . . . construction job progress to really nail down where you're going in phasedown." Direct labor at the sites was still the key variable to which logistical and administrative support was tied. "So much of the support here in Tel Aviv," Gregor observed, "is contingent on exactly when we're going to turn over these facilities and phase the direct labor out of here." Moreover, the lack of a firm decision on a location for closeout made it hard to determine who in the Corps would stay with the project until the end.³⁶

In October 1981, while the project raced toward joint occupancy, Wall set up a task force to plan for manpower reductions. The group included Moore, deputy commander; Louis R. Unzelman of Management Support Associates; and Thomas, former chief of engineering and now Wall's assistant for technical affairs. With Gregor about to go home, Thomas managed reductions of government personnel and relations with the Sinai Construction Management Office. Wall wanted the task force to review the phasedown plans of the area engineers and suggest changes. Overall, they were to ensure the best use of available people. "I expect you to meet with resistance" from the area offices, staff sections, and the general managers of the contractors, Wall told them. "Do not let this resistance deter you from completing your mission in an objective and clinical manner."³⁷

In the fall, while Wall's office faced the technical difficulties in reconciling phasedown with an unclear construction future, there was significant disagreement on the proper pace for the effort. The questions centered on priorities and perspectives. Hartung, who was concerned mainly with keeping costs down, insisted that the Corps paid too little attention to reducing the direct labor at the sites and had no real plan for cutting back, "just a series of ideas." Wall, meanwhile, cut overtime to 5 percent. He also issued three schedules for reducing contractor forces. These plans showed the number of workers at joint occupancy and the relationship between direct and indirect labor, both at that time and projected into the future. Wall required the area offices and Management Support Associates to make the monthly cuts in these manpower plans by the fifteenth of each month (*Tables 4 and 5*).³⁸

Griffis at Ramon protested the severity of the cuts. He claimed Wall's office cared only about placating Hartung. Any reductions before the end of January would threaten his schedule, which re-

TABLE 4—APPROVED MANPOWER PLANS FOR AREA OFFICES,
OCTOBER 1981

Date	Ovda			Ramon		
	Direct Labor*	Indirect Labor	Total	Direct Labor	Indirect Labor	Total
Oct 81.....	2,592	1,040	3,632	2,515	1,443	3,958
Nov 81	2,346	963	3,309	2,400	1,135	3,535
Dec 81	2,000	932	2,932	1,850	1,110	2,960
Jan 82.....	1,800	826	2,626	1,800	933	2,733
Feb 82.....	1,480	737	2,217	1,600	717	2,317
Mar 82	1,160	661	1,821	1,000	517	1,517
Apr 82	650	599	1,249	450	376	826
May 82	350	414	764	250	211	461
Jun 82.....	80	282	362	100	100	200
Jul 82.....	0	95	95	0	21	21

*This column of figures includes workers in plants and shops.

Source: Ramon Approved Manpower Plan, 28 Oct 81; Approved Manpower Plan, 28 Oct 81. Both in IABPC, 48/6.

TABLE 5—MSA MANPOWER PHASEDOWN SCHEDULE, NOVEMBER 1981

Date	Americans/ Third-Country Nationals	Israelis	Total
Oct 81.....	116	31	147
Nov 81	109	28	137
Dec 81	76	32	108
Jan 82.....	65	30	95
Feb 82.....	53	29	82
Mar 82	53	28	81
Apr 82	53	28	81
May 82	36	21	57
Jun 82.....	35	20	55
Jul 82.....	26	11	37
Aug 82	22	9	31

Source: MSA Accelerated Manpower Phasedown Schedule, 17 Nov 81, IABPC, 48/6.

mained his primary concern. Hartung was not impressed. He wrote Gilbert that the plan that Griffis found so drastic "is not considered as aggressive as it should be." With the contractors more distressed than Griffis and with Bar-Tov agreeing with Hartung, the range of opinions was wide. At joint occupancy a consensus seemed unlikely. Wall was caught in the middle. He told Bratton that "the PMs (especially Hartung) believe I did not slash enough," but he thought his cuts were "realistic and as deep as we should go now into the contractors' forces without adversely impacting con-

struction progress." Because of the gathering momentum, he did not want "to take chances in slowing or stopping the charging rhinoceros in the field right now."³⁹

At least there was harmony regarding where management should focus its efforts. All agreed that controlling the size and composition of the work force held the key to the remaining cost of the program. At the headquarters, such control involved management of the ratio of direct to indirect labor in addition to the spread of labor over the remaining months. These two factors directly affected outlays for labor, which West estimated in the autumn of 1981 constituted 40 percent of the remaining cost. Six months later, it was 60 percent.⁴⁰

Careful management to reduce the work force faced several obstacles. At Ovda Kelly had to break up what he considered to be a good team of government and contractor management. Naturally, he was reluctant to do so. To some others in the government, the contractors seemed slow to cut management, so the ratio of indirect to direct labor tended to stay high. At the same time, the support contractor thought it bore an unfair portion of staff reductions. Shepherd pointed to the 70 people he had lost between February and October 1981 and the 50 more who would go by year's end, while the Corps cut its staff by 25. The apparent disparity impeded cooperation and hurt morale. While Tel Aviv concentrated on the size of the force and the balance between direct and indirect labor, at the sites concerns focused on keeping the right people in the right specialties. Orderly completion depended on the availability of the proper mix of skills. A balance had to be struck between curbing costs and the imperatives of the schedule.⁴¹

Wall relied on Moore's task force to balance cuts against job needs. His phasedown plan divided the program's "manpower universe" into four parts: the Department of Defense, including civilians and the Army and Air Force at Tel Aviv, the sites, New York, and Washington; Management Support Associates, also at Tel Aviv, the sites, and New York; and the design and construction consortia, in Israel and New York as well as Bangkok for Negev Airbase Constructors and Lisbon in the case of Air Base Constructors. For each, he directed the task force "to assure that by the 15th of each month manpower objectives are reached and positively accomplished." The task force assessed progress every two weeks and recommended adjustments monthly. Their determinations were based on progress on the job matched against available manpower and skills. West's management analysis and control division, formed of the old resource management and planning and coordination offices in June 1981, monitored progress and collated data from three phase-

down managers. Gregor watched the Department of Defense and Management Support Associates segments; the deputy area engineers oversaw their respective construction contractors. Wall intended that "this manpower plan will be the basis for manpower reductions throughout the remainder of the project."⁴²

Before the year ended Wall eliminated the quality assurance organization and returned the function to the area offices. From remnants of the disbanded teams, he assembled a small supervision and inspection group for the construction division in Tel Aviv, in effect giving Damico oversight of quality assurance. This reorganization paved the way for consolidating the duties of the contracting officers in Tel Aviv. The change also showed anew how readily the support contractor responded to the project's changing needs.⁴³

Government employees represented a special concern. Wall thought well of the people who remained and wanted to minimize instability due to the distractions of job seeking during the last months of the project. His personnel officer, Janet Sales, was responsible for reducing the anxieties caused by phasedown. For the various job classifications in the office, she had to decide when to end recruiting and to stop renewing travel agreements while providing counseling and publicizing placement programs. Bratton's office helped with assurances of job placement, but the decline in staff size inevitably created morale problems. People worried about their future prospects, and rumors began to fly, especially in the confined working and living space of the Palace. Anxiety could be reduced by careful sequencing of phasedown events and by assuring that everyone knew this sequence as early as possible. Yet, even with precise planning, eliminating the stress was impossible. As Sales noted, employees had to take care of themselves as well as the project.⁴⁴

While Wall set in motion these activities relating to the number and kind of specialties needed for the remainder of the project, he also started what became an ongoing reorganization of the headquarters. The changes in office structure aimed mainly at consolidating similar functions while reducing the staff. The organization that evolved during the early months of 1982 made greater use of majors and lieutenant colonels, who were less expensive and more flexible for short term use than were civilians.⁴⁵

These changes started in the summer of 1981, when Wall merged resource management with planning and coordination to form the management analysis and control division. The new element also included the remnants of the engineering division's estimating branch. West thought the combination was a logical fit of functions. It eliminated internal discrepancies in estimates and fa-

cilitated staff reductions. Although resource management complained that the project needed the independent financial analysis that the office had once provided, the loss itself could also have advantages. General Bar-Tov frequently commented on the "Egyptian culture" of reporting represented in the inconsistent and confusing figures he received from the Americans. This complaint once caused Griffis, when he was in the planning and coordination office, to ponder whether Bar-Tov got too much information. "We will have to do a better job digesting it for him," Griffis told his staff, particularly to maintain consistency with the figures from resource management. "There is," Griffis claimed, "an awful waste of management talent to have to explain answers every time someone in the Israeli PM shop finds an inconsistent number; one he doesn't understand."⁴⁶

In another consolidation in the fall of 1981, Wall created the administration and logistics division. This element consisted of the transportation office, procurement and supply, and administrative services, all under Maj. Harry J. McGinness, formerly the transportation officer. Although the branches continued to report directly to the executive office, Graw objected and soon left. This division changed again in March as procurement activities ended. Administration and logistics was left with its two remaining branches, and procurement went into a division that combined the function with property accountability. The new office came under Alfred Lellis, once head of the support group in New York and the only civilian to head a division created during Wall's reorganizations. Property accountability had started as a one-person operation in resource management. Then it became a branch in West's division before emerging to prominence under Lellis. Now, with very few purchases to be made, Lellis concentrated on transferring program property to the Israelis. He analyzed consumption of supplies and equipment, set about accounting for losses, and prepared for an inventory.⁴⁷

Along with the new organizational arrangements came a larger role for the security officer, Robert Amick. He became deputy project manager for support in February. The new divisions came under him, along with public affairs, security, and communications. Like McGinness, he preferred that those responsible for these functions "be action officers, deal direct [*sic*] with the commander and deputy commander on actions." He wanted them to keep him informed; he in turn tried to help them where he could.⁴⁸

Wall was pleased with the changes. Officers "march to a different drum," he said, forgetting or ignoring the difficulty he once had trying to find colonels to accept the challenges of the pro-

gram. Wall held that officers did additional work and accepted schedule changes without complaint, understanding "by Gestalt reasoning" what was expected. Civil servants, on the other hand, needed explanations for new and different demands on them. "I don't have the time on a job like this," Wall said, "to explain all these things." The new arrangement was not trouble free. Some officers would not stay beyond their one-year tours of duty, so short-term replacements were needed to fill gaps. Also, the reorganization created civilian-military relationships with stresses of their own. For example, Joseph R. Chapla, the GS-15 resource manager, found himself in the unusual situation of working for a lieutenant colonel; similarly, Graw, a GS-14, reported to a major. Graw was so disturbed about the situation that he left. Chapla stayed but resented any levels of authority between him and the commander.⁴⁹

While these changes took place, Wall still tried to figure out where he would close out the contracts. By the end of 1981 he was reconsidering locations for the later phases of closeout. His revised plan of November 1981 made a case for conducting the operation through phase III in Tel Aviv rather than in the United States. His staff was experienced and worked a longer week than stateside offices. He expected that closeout would take five months in Tel Aviv and nine back home. If he had to go to the United States, he preferred New York. The veterans of the support group were there, as well as offices, furniture, and computers. Besides, Management Support Associates was based in the city, and Perini was in nearby Boston. An alternative choice involved leaving Tel Aviv by September as originally proposed and moving to Fort Belvoir, Virginia, about fifteen miles south of Washington. This plan, which would allow release of contractor employees to their respective home offices, envisioned closing the New York office in July and maintaining a small staff at Belvoir until all issues were decided. The plan put the closeout near the Corps headquarters and had the lowest real estate cost. Wall still thought completion in the United States would take longer, but McNeely and Wilson favored Fort Belvoir. So Wall and his staff had to take this option seriously.⁵⁰

The decision on a location came during Wilson's January visit. He and McNeely considered the original proposal the cheapest. So Wall decided to set up a small resource management unit at Fort Belvoir as early as July to maintain continuity in financial matters and to serve as an advance party. He still hoped to have many issues settled by then. He thought his office and the contractors could resolve or at least identify outstanding issues before returning to the States. The decision disappointed Wall. He thought proximity to the chief's office at best irrelevant and at worst undesirable. How-

ever, the choice logically followed Bratton's emphasis on an early departure from Israel. Hartung, who cited the cost to the Israelis of a continued American presence, also wanted to leave quickly. And Wall knew that he needed "to find a way to get gracefully out of here so that the Israelis can be as happy as we can make them and that the Air Force can be as proud as we can make them too."⁵¹

Meanwhile, in early February he consolidated contract management in Tel Aviv and named Moore contracting officer for both sites. The area engineers became Moore's authorized representatives at that time. Wall also brought all contract administrators and attorneys together in Tel Aviv. Graw thought the persistent procurement problems at Ramon and area office resistance to cost reduction hastened the decision, but consolidation of the project was also becoming inevitable as it neared completion.⁵²

Manifestations of constriction were also seen in Tel Aviv. Reducing the small stock of houses leased for senior officials, which had begun in the spring of 1981, continued. The project staff also started to consider the problem represented by the Palace. Rehabilitating the hotel after three years of project use promised to be a complicated job. Wall preferred to seek a cash settlement with the proprietor. However it was not clear at that time that anything the project did would satisfy the owner.⁵³

In the field less uncertainty existed regarding the pitfalls of the late stages of the job. Project personnel had been warned early of problems during the transition from construction sites to bases. The team that assessed direct manpower needs in August 1980 had cautioned that productivity would suffer during joint occupancy. All steps, the members urged, should be taken to turn over facilities that were as complete as possible in order to minimize the period of shared occupation. And indeed inefficiencies did occur during turnover and activation. Sometimes the problems stemmed from a lack of coordination. At Ramon a guard at the ammunition storage area refused entry to two crews seeking to install doors. Verification of their security clearances took two hours. In other cases, workers inadvertently picked Israeli holidays to seek entry into areas for which they needed escorts.⁵⁴

Operations on the new bases also restricted the movement of workers. Although the job did compress as it neared completion, the need to cross the runways presented a safety and security problem until the end. The movement of construction crews and equipment had to be coordinated with the arrival and departure of planes, reducing the flexibility needed for an efficient construction sequence and often requiring that truck traffic be regulated. Moreover, the flights of high-performance aircraft dis-



Col. Fletcher H. "Bud" Griffis and ABC General Manager Fred Butler at the opening of Ramon Air Base in November 1981.

tracted workers, as did arrival of some Israeli Air Force women assigned to the garrisons.⁵⁵

Through the activation process, participants cooperated well. The Israeli base and wing commanders were accommodating, and Colonel Moore attributed much of the success of the transition to the Israeli officers involved. The project also benefited from cooperation between the constructors. Bar-Tov and Hartung thought there was never enough joint planning and purchasing, but the sharing of materials and experience did increase toward the end. In February 1981 Butler suggested that the consortia trade lists of excess inventory to hold down overages. Such exchanges occurred frequently in the final year.⁵⁶

By early April 1982 meeting the all-important deadline for initial operating capability, less than four weeks hence, was no longer an issue. Even the usually cautious Corps headquarters was convinced that success was at hand. Wilson told a reporter that work was so far along that everything would be done six months ahead of schedule, and *Engineering News-Record* proclaimed that the con-

tractors had "won their battle against a fast-approaching completion date." Deputy Area Engineer Moon at Ovda listed requirements in the area office journal, not for the April milestone, which was now taken for granted, but for completion of the entire base. Some construction remained, deficiencies in what had already been done needed correction, and documentation in the form of operations and maintenance data and as-built drawings still required completion.⁵⁷

One other area of substance required attention. The equipment and property bought for the job belonged to the Israeli government. These materials had been a source of contention all along. The Israeli construction industry had strenuously opposed importing new machinery when local resources sat unused. Construction interests revived the issue from time to time, although even the Israelis could not sustain a dispute indefinitely. The Ministry of Defense countered some of the objections by promising to store the equipment for emergencies while continuing to use machinery owned by civilians for routine construction. Perhaps the desert compounds that held rows of captured Soviet-made vehicles and equipment would become home for the earth movers and dump trucks left behind by the project. In any event, the government never put to rest the anxieties of the construction industry. Even at the very end of the project, General Ivry incurred the contractors' wrath. On television, he noted that Israeli firms could not have met the schedule. His statement merely reaffirmed the project's original premise, but building trades groups responded angrily, demanding apologies and investigations of the program and the policies that spawned it.⁵⁸

Compared to what Ivry confronted, the Americans faced only the relatively benign matter of accounting for the equipment and turning it over to the Ministry of Defense. Little early planning had been done for this task. McNeely, who remembered the difficulties resulting from poor accounting procedures in Morocco during the 1950s, worried about this oversight. "On any future cost-type job," he said, "the property man should be on the first airplane to the work site." Nevertheless, for some months the Israelis were themselves unready to accept the property. So until 1982 very few actual turnovers took place.⁵⁹

The delay was fortunate. Israeli law required that the Ministry of Defense pay import duties on the equipment. This stipulation meant that a complete inventory would be necessary. Moreover, matters of taxation involved the Ministry of Finance, which Wall called "the bureaucracy to answer the bureaucrat's prayer." So Wall expected to face a large administrative burden. He tried to force

the issue, hoping perhaps to at least come to a definitive understanding. By the spring of 1982 there was very little progress. A standard procedure had been published the preceding year, and a few vehicles had been transferred. Still, most of the big items sat locked in yards at both sites, pending an agreement, and the issue was degenerating into disputes about who should guard and maintain the equipment.⁶⁰

Hartung expected the transfer of property to be an even worse problem for the Israelis. After all, their program management would have to conduct inventories and decide on redistribution of the assets while activating the bases. Hartung saw the turnover as two separate matters. First were the large items, about \$150 million worth of equipment and buildings. Then came the small things—spare parts, materials, and tools—valued at about \$30 million, which according to Hartung were “the real problem” because of the quantities. With more important things to do, the Ministry of Defense fell behind in its efforts to deal with the property. Finally, Bar-Tov took an easy way out. He decided to save time and money by foregoing a detailed American inventory, which he would have to verify. Instead, he accepted Hartung’s view that a thorough American accounting would be wasteful because he would have to do one as well. Bar-Tov settled for an estimate of quantities. This decision was a stroke of good fortune for the Americans and left McNeely wondering “how in hell we came out as clean as we did.”⁶¹

Some of the elements of completion were under better control. In the summer of 1980 the Near East Project Office and Management Support Associates had started planning for the manuals and other documentation on the operations and maintenance of the facilities at the new bases.⁶² David Levy from the engineering division, who coordinated the effort, visited the Sinai bases and talked with Israeli Air Force base engineers about their approach to installation maintenance. This important but tedious compilation—Thomas called it “dog work”—was done as construction progressed, so it presented no problem during the late stages. According to McNeely, Hartung reported in April 1982 that “O&M documentation is progressing well, will be completed shortly and is by far better than any he has ever seen and received on U.S. projects.”⁶³

Even with the quality of the documentation, some Americans were concerned about the ability of the Israelis to maintain the bases. To Griffis it was “evident that the IAF does not have the resources assigned to Ramon sufficient to maintain this sophisticated air base.” Two days before the 23 June closing of his area office, he noted poor maintenance practices, including the dismantling of some systems to provide parts for others. He expected that the fifty-

person base civil engineer organization that the Israeli Air Force had assigned to Ramon would prove woefully inadequate. Wall agreed: "My judgment is that the IAF cannot keep up with ordinary maintenance and cannot even fully man the sophisticated facilities that have been designed, constructed, and turned over to it."⁶⁴

As the deadline for initial operating capability neared, the political imperatives that drove the program came into focus. Some Israelis hoped that departure from the Sinai would bring lasting peace, but others were pessimistic. Reluctance, anguish, and even a little resistance marked completion of the withdrawal. At the coastal town of Yamit, soldiers of the Israel Defense Force found themselves in a dramatic confrontation with Israeli civilians. The troops forcibly removed some settlers and bulldozed buildings. The Israelis had invested about \$12 billion and a little of themselves in the region. For the first time, they were about to withdraw from territory they had won in war, and they had put down some roots there. The armed forces' magazine articulated a sense of loss: "Sinai is dying. This is seen everywhere. It may possibly bloom again soon—but for others. We, its residents during recent years, will then be strangers. Our home will no longer be here, and we shall come as guests to the houses we built. The feeling, even now, is strange."⁶⁵

The absence of unanimity within the fractious polity of Israel—or among its supporters in the United States—on such a vital issue was not surprising. Many American Jews urged Israel to stay in the Sinai. Only a month before the scheduled departure, fifty-one of these, who called themselves "American Jews deeply concerned about the security and survival of Israel and the United States," signed a *Jerusalem Post* advertisement urging the government to reconsider. "Stand firm," the public letter exhorted, "and the Jews of the world will stand firm with you!" The names included Irving Kett, who identified himself as "Colonel, . . . U.S. Army Corps of Engineers." Wall and his staff were furious, but they confined their anger to intraoffice memorandums and passed the matter to Washington. The issue of whether Kett's use of his rank and affiliation in the *Post* letter violated Army regulations went unresolved there. Wall had enough problems: "The task of building the air bases at Ovda and Ramon involves political as well as construction problems. Letters such as [this] one . . . do not make this task any easier."⁶⁶

Others were unhappy for different reasons. By the spring of 1982 Hartung hated his association with the project. Bitterly frustrated by the constraints under which he worked, he wanted to leave his job and Tel Aviv as soon as possible. On a trip to the United States in mid-April, he and Gilbert raised the issue with Ah-

mann. Hartung said that he no longer served a useful purpose, and neither did the Air Force's engineering and services directorate. McNeely reported that Hartung "adamantly averred that he required authority if he was to function as the DOD Program Manager or his presence in Israel was a complete waste of time." Ahmann disagreed. He saw the program as a well-done team effort of which everyone should be proud. The memorandum between the Air Force and the Corps of Engineers provided basis enough for Hartung's continued presence. Ahmann wanted to keep the team together until the end. Thwarted again, Hartung went to San Antonio, Texas, where he accepted an award from the Society of American Military Engineers for his accomplishments in the program before returning to Israel at the end of the month.⁶⁷

Hartung probably did not appreciate the ironic juxtaposition of his failed effort to break free and the award in San Antonio. Just after returning to Tel Aviv, he said, "This has been the most miserable, unfulfilling assignment I have ever had in my career, and if I had had any idea it was like this, I would never have come over here." Part of his misery stemmed from his constrained role and the agreement that defined it. Wall's office, on the other hand, just did not take him or his position seriously. "Hartung," McNeely said, "even though he was Air Force, was the DOD PM and the American top dog on the scene. . . . We didn't want to work for the Air Force and forgot or never put in perspective that Hartung was DOD." In the end, McNeely concluded, "The infighting, end-runs, and day-to-day hassles took their toll on him."⁶⁸

While Bar-Tov found much to dislike in the American way of construction, he did not leave the program with anything approaching Hartung's bitterness. Certainly his inclination to improvise and deal directly with the contractors was frustrated many times. Hartung fended off Bar-Tov, souring what had been a warm relationship. At the end, Bar-Tov complained long and loud about the withholding of information and his inability to influence decisions. But he gave as good as he got. He did not shy away from confrontation, public or otherwise, and used all means, ranging from a 4 July message "to my American friends in the Negev air base program" to an impromptu harangue at a program social gathering, to make sure the Americans got the message about Israeli standards and needs.⁶⁹ After all, it had been the sheer force of his personality that had propelled him so close to the center of the decision-making process, despite the lack of formal provision for his participation. The same strength sustained him through the program and kept it from defeating him.

Wall had the upper hand and knew it. Bar-Tov thought Wall never paid attention to Hartung and that the notion of an American team was little more than a convenient fiction. Wall did frequently refer to the program team—the three-legged stool was his phrase for joint program and project management—but he also expressed his attitude toward his relationship with Hartung's office in a restatement of the golden rule: "He who has the gold rules."⁷⁰ So, it was hardly surprising that in the end only Wall was smiling.

On the job, 25 April passed almost unnoticed. Three weeks later a ceremony at Ramon formally inaugurated the two new bases. The Israeli government seemed to play down the occasion, waiting until 17 May to mark the transfer with Defense Minister Sharon in attendance rather than Prime Minister Begin.⁷¹ Perhaps the delay served to obscure the association of the opening with the withdrawal that had so recently sparked considerable passion.

In early June plans were made for closing the area offices and camps. Kelly listed five prerequisites, which he intended to carry out by 15 July. All horizontal work was to be done by 30 June, with construction deficiencies corrected by the same date. A week later the cinema was to be finished, and the last concrete was to be poured in the helicopter complex on 10 July. That left four days for cleaning up. Ramon planned to close a little earlier.⁷²

At the same time, Hartung and Bar-Tov drafted procedures for concluding the program. The document dealt with several pending matters, including completion of construction, the need for an American program management agency, operations and maintenance documentation, the disposal of remaining property, reports, fiscal matters, and other activities associated with closing out the contracts. A few provisions in the document caused argument. Defense Security Assistance Agency's acting director, Walter B. Ligon, expressed concern that Hartung's departure might be premature. His desire to leave was no secret, and Ligon accepted an arrangement that permitted Hartung to go at the beginning of July. Ligon also objected to a suggestion that his agency had accepted Ministry of Defense participation in the closeout. Resolution of this matter awaited discussions between the Corps and the Israelis. Despite these objections, Hartung and Bar-Tov signed the essentially unchanged memorandum on 22 June.⁷³

Wall also objected to some parts of the document, particularly Hartung's attempt to extricate himself. Again, he wrote "Tilt" in the margin of the draft next to the most offensive paragraph. Even now, in the waning days, Wall did not want to deal directly with Bar-Tov's office and did not want the area offices in direct contact with the Israelis in the field. To Hartung he stated clearly, "I am

not a party to your procedure and am reviewing the impact." Moreover, he said, the memorandum did "not appear to conform to Mr. Ligon's DSAA guidance." At the end of June Wall's office still held back from acknowledging the validity of the procedures. Moore said he awaited formal approval from U.S. Air Force headquarters. Hartung told Damico that he had approval by telephone and wanted the Corps to follow the procedures. "The procedures are in effect," Damico reported back, "and we should follow them unless we intend to ignore it [*sic*]." ⁷⁴ Hartung departed within a week, leaving Lt. Col. Francis A. DeMartino as his representative.

It was not long until this last dispute between the Corps and the Air Force in Tel Aviv became moot. The area office at Ramon already closed a week earlier; Ovda shut down on 9 July, leaving the movie house to be finished by the Israelis. The telex connection with the Pentagon was discontinued after work on 15 July, and Wall left two weeks later to command the Corps' South Atlantic Division in Atlanta, Georgia. His 1 April goal of turning everything over to the Israelis by the end of July and leaving before September was in hand. ⁷⁵

Moore took over as commander of the project. In his first act as the new boss, he moved the small remaining staff out of the Palace and down the beach to the Plaza Hotel. Restoration of the Palace, which had been home for the project for nearly three years, and final turnover of property to the Ministry of Defense began in earnest. In another month he too would depart, leaving David Levy as a one-man liaison office working with the defense attache at the embassy. ⁷⁶

Notes

1. Wall interview, May 82.
2. Hartung interview, May 82.
3. Moore interview, Apr 82.
4. Ltr, Wall to Hartung, 9 Oct 81, sub: Funding Increase to the Plan of Work (POW) for the Israeli Airbase Program, IABPC, 49/15; Shaw interview, Apr 82.
5. West interview, Oct 81.
6. Ltr, Hartung to Bar-Tov, 19 Oct 81, sub: Request for Additional GOI Dependable Undertaking, IABPC, 50/2; Ltr, Hartung to Wall, comments on Wall's draft letter, 22 Oct 81, sub: Requirement for Obligation Authority and Program Funding, IABPC, 49/15; Telex, Hartung to Gilbert, 29 Oct 81, IABPC, 50/2.
7. Telex, Hartung to Gilbert, 29 Oct 81.
8. Brown interview, Apr 81; Chapla interview, Apr 81.
9. MFR, Wall to Hartung, 4 Nov 81, sub: Phasedown and Costs, IABPC, 48/6; Ltr, Wall to Hartung, 5 Nov 81, sub: Requirements for Obligation Authority, IABPC, 88/6.
10. Ltr, Wall to Hartung, 10 Nov 81, sub: Additional Cost Figures, IABPC, 48/6; Ltr, Bratton to Chief of Staff, USAF, Attn: AF/LEE, 10 Nov 81, sub: Requirement for Obligation Authority—Israeli Air Bases, IABPC, 50/2.
11. Ltr, Hartung to Wall, 11 Nov 81, sub: Requirements for Obligation Authority, IABPC, 50/2.
12. Ltr, Wall to Hartung, 11 Nov 81, sub: Requirements for Obligation Authority, IABPC, 50/2; MFR, Wall, n.d., IABPC, 48/6; Ltr, Wall to Hartung, 13 Nov 81, sub: Continuation of Letters of Requirements for Obligation Authority, IABPC, 50/2.
13. Ltr, Hartung to Bar-Tov, 15 Nov 81, sub: Request for Additional GOI Dependable Undertaking, IABPC, 50/2.
14. Ltr, Wall to Wilson [draft], 19 Nov 81, IABPC, 50/1; Ltr, Hartung to Wall, 11 Nov 81, sub: Requirements for Obligation Authority; West interview, Oct 81.
15. Ltr, Wall to Hartung, 31 Dec 81, sub: Estimate to Complete Israeli Airbase Program, IABPC, 50/1.
16. Wall interview, May 82; Memo, Wilson for DAEN-MPE, 4 Jan 82, sub: Tasking Memorandum—Israeli Air Base Program, IABPC, 50/4.
17. Memo, Wilson for DAEN-MPE, 4 Jan 82; Ltr, Wall to Hartung, 8 Jan 82, IABPC, 50/4; Ltr, Bar-Tov to Hartung, 8 Jan 82, sub: Program Cost Review, IABPC, 50/4; MFR, Wall, 21 Jan 82, sub: General Wilson's Visit, IABPC, 41/13; MS, Directorate of Engineering and Services, HQ, USAF, Millie Glasebrook, compiler, History of the Directorate of Engineering and Services, DCS/L&E, 1 July–31 December 1980, vol. I [Office of Air Force History], p. 84; MS, Directorate of Engineering and Services (Glasebrook), History of the Directorate of Engineering and Services, 1 January–30 June 1981, vol. I, pp. 91–95; MS, Directorate of Engineering and Services (Glasebrook), History of the Directorate of Engineering and Services, 1 July–31 December 1981, vol. I, p. 104; Edward L. Parkinson, "Getting a Handle on Co\$t," *Engineering and Services Quarterly* 23 (Summer 1982): 20–24.
18. Ltr, Wall to Hartung, 12 Jan 82, sub: Requirements for Obligation Authority [draft], IABPC, 50/4; Shaw interview, Apr 82.
19. Reimer interview, Feb and Apr 82.
20. MFR, Reimer, 1 Feb 82, sub: Special Task Team Methodology Disagreement, IABPC, 41/13; Reimer interview, Dec 85.

21. MFR, Reimer, 1 Feb 82, sub: Special Task Team Methodology Disagreement; Reimer interview, Feb 82; Wall interview, Apr 82; Ltr, Wall to Hartung, 1 Feb 82, IABPC, 50/3.

22. Ltr, Wall to Hartung, 4 and 5 Feb 82, IABPC, 50/3; Interv, author with Lt Col Robert L. Amick, Apr 82, Tel Aviv, Israel.

23. Ltr, Bar-Tov to Hartung, 9 Feb 82, sub: COE & USAF Program Cost Evaluation Team, IABPC, 50/3; Moore interview, Apr 82 and Dec 85; Wall interview, May 82; Amick interview.

24. Ltr, Wall to Hartung, 4 Feb 82, IABPC, 50/3; Moore interview, Apr 82 and Dec 85; Amick interview.

25. Reimer interview, Feb 82 and Dec 85; Moore interview, Dec 85; MS, Directorate of Engineering and Services (Glasebrook), History of the Directorate of Engineering and Services, 1 July–31 December 1981, vol. I, p. 95.

26. Ltr, Wall to Hartung [two separate notes], 10 Feb 82, IABPC, 50/3.

27. Wall, Project Notebooks, vol. VII, 19 Jan 82, IABPC, 90; RAO, Daily Journal, 15–16 and 18–21 Jan 82, IABPC, 48/8; Brown interview, Apr 82.

28. Ltr, Wall to Hartung, 14 Feb 82, IABPC, 50/3; RAO, Daily Journal, 19 Feb 82, IABPC, 48/8.

29. Brown interview, Apr 82; Shepherd interview, May 82; Wall interview, May 82.

30. Bar-Tov interview, May 82. Ltrs, Wall to Hartung, 9 Nov 81; Wall to Wilson, 10 Nov 81; Wall to Bratton, 10 Nov 81; Wall to Ahmann, 10 Nov 81; Wall to Brown, 10 Nov 81; in IABPC, 50/2. Ltr, Wall to Bratton, 5 Nov 81, sub: Monthly Progress Report, Israeli Airbase Program, IABPC, 88/6.

31. Shaw interview, Apr 82.

32. Maloney interview, May 82; Hartung interview, May 82.

33. Shaw interview, Apr 82; Memo, Chapla for Contracting Officers; CORs; Chief, CONUS Support Group; Commander, NEPO; DOD PM; and Chief, RMO, OCE; 8 Mar 82, sub: Program Obligation Authority—Interim Operating Policy, IABPC, 41/12; Moore interview, Apr 82.

34. Ltr, Wilson to Wall, 30 Sep 81, sub: OCE Special Task Force Findings, IABPC, 58/1.

35. Definition of Phases, n.d., file 201–07, NEPO files, Box T–228; Interv, author with Lt Col Jack H. Clifton, May 81, Tel Aviv, Israel. This interview is essentially a transcript of Clifton's briefing on the phasedown plan.

36. Gregor interview.

37. Memo, Wall for Task Force Members, 5 Oct 81, sub: Manpower Phase Down, IABPC, 48/6; Thomas interview, Oct 81.

38. Hartung interview, Oct 81; Ltr, Wall to Area Engineers, 29 Oct 81, sub: Action Plan for Manpower Phase Down, IABPC, 48/6; Memo, Wall for Contracting Officer, MSA, 9 Nov 81, sub: Action Plan for Manpower Phase Down, IABPC, 48/6.

39. RAO, Daily Journal, 23–27 Oct 81, IABPC, 48/8; Telex, Hartung to Gilbert, 29 Oct 81, IABPC, 50/2; Ltr, Hartung to Wall (on legal pad), 2 Nov 81, IABPC, 50/2; MFR, Wall to Hartung, 4 Nov 81, sub: Phasedown and Costs, IABPC, 48/6; Ltr, Wall to Bratton, 5 Nov 81, sub: Monthly Report, Israeli Airbase Program.

40. Hartung interview, May 82; Moore interview, Oct 81; West interview, Apr 82.

41. Maloney interview, May 81; Kelly interview, Oct 81; Shepherd interview, Oct 81; Hartung interview, May 82; Moon interview.

42. NEPO Organization Chart, Jun 81, IABPC, 88/5; Memo, Wall for Contracting Officers, 9 Nov 81, sub: Management Plan for Manpower Phasedown, IABPC, 48/6.

43. Ltr, Wall to Hartung, 9 Nov 81.

44. Wall interview, May 82; Sales interview; Gregor interview; Kelly interview, Oct 81; Moore interview, Oct 81.

45. Moore interview, Oct 81 and Apr 82; Wall interview, May 82.
46. West interview, Oct 81; Shaw interview, Oct 81 and Apr 82; Bar-Tov interview, Apr 81; Griffis, P&C Journal, 14 Aug 80, IABPC, 41/1.
47. Interv, author with Maj Harry J. McGinness, Apr 82, Tel Aviv, Israel; Graw interview, Oct 81; West interview, Oct 81; Lellis interview.
48. Amick interview.
49. Wall interview, May 82; Wall, Project Notebooks, vol. VII, 7 Dec 81, IABPC, 90; Kelly interview, May 81; Graw interview, Oct 81; McGinness interview; Moore interview, Oct 81 and Apr 82.
50. Phase Down Plan (revised 22 Nov 81), IABPC, 58/4; Annex B, Phase III Location, Encl to Memo, Wall for Contracting Officers, 17 Dec 81, sub: Phase III Closeout Location, IABPC, 58/5.
51. Ltr, Wall to Maj Gen Wilson, 4 Feb 82, sub: NEPO Close Out Plan, IABPC, 58/5; Wall interview, May 82; Hartung interview, May 82.
52. Ltr, Wall to Maj Gen Wilson, 4 Feb 82, sub: NEPO Close Out Plan; Moore interview, Apr 82; Graw interview; Oct 81.
53. Wall interview, May 81; Clifton interview; Moore interview, Apr 82.
54. Special CE/MSA Team, CE/MSA DCC Direct Manpower Plus-Up Study, 10–12 Aug 80, IABPC, 4/4; Moon interview; Parkes interview, Oct 81; Peterson interview, Oct 81.
55. Moon interview; Parkes interview, Oct 81; Peterson interview, Oct 81; Moore interview, Oct 81.
56. Wall interview, Oct 81 and May 82; Hartung interview, Oct 81 and May 82; Moore interview, Apr 82; *ENR* 209 (22 April 1982): 75; OAO, Master Diary, 27 May 80, IABPC, 84/4; DF, Baer, Chief, Construction Division, to Area Engineer, Ramon, 15 Apr 80, sub: Capital Equipment, IABPC, 33/1; Ltr, Griffis to Butler, 28 Oct 81, sub: Inventory of Reinforcing Steel, IABPC, 24/4; Shepherd, Daily Journal, 26 Feb 81, IABPC, 89/1.
57. *ENR* 208 (11 March 1982): 23; OAO, Master Diary, 1 Apr 82.
58. *Jerusalem Post*, 19 and 27 Sep, and 5 and 8 Oct 79; (Tel Aviv) *Journal of Commerce*, 14 May 80; (Tel Aviv) *Davar*, 1 and 3 Jun 80; (Tel Aviv) *Sha'ar*, 18 Nov 80; (Tel Aviv) *Ma'ariv*, 5 May 82; (Tel Aviv) *Ha'aretz*, 19 and 24 May 82.
59. Chapla interview, Aug 80; McNeely interview, Sep 83; MFR, Wharry, 17 Dec 80, sub: Trip Report—Israel Air Bases Construction Project.
60. Wall, Briefing for Incoming Officers, 14 Jun 81; Memo, Wall for Hartung, 28 Dec 81, IABPC, 50/1; Memo, Wall for Hartung, 10 Feb 82, IABPC, 50/3; SOP 31, Transfer of Defense Articles and Services (Equipment and Material), 20 Apr 81, revised 12 Jun 81, IABPC, 15/31; McGinness interview; OAO, Master Diary, 4 Mar 81, IABPC, 85/1.
61. Hartung interview, May 82; MFR, McNeely, 22 Apr 82, sub: Meeting with DSAA on Israeli Air Base Program, IABPC, 41/13; Lellis interview; Moore interview, Apr 82; McNeely interview, Sep 83.
62. Six types of documents ultimately were transferred for each base: as-built drawings; contractor's shop drawings; vendor's data; operations and maintenance manuals, including an index; a master equipment list; and contractor's design calculations and analysis. Ltr, Kelly to David Holmes, 10 Nov 81, sub: Operation and Maintenance Documentation Instruction, IABPC, 35/2.
63. Ltr, Thomas to GM, MSA, 2 Jul 80, sub: Completion of O&M Documentation Instruction, IABPC, 33/2; MFR, David Levy, 8 Aug 80, sub: Transmission by the DCCs of Project Documents Related to Operations and Maintenance, IABPC, 23/1; MFR, McNeely, 22 Apr 82, sub: Meeting with DSAA on Israeli Air Base Program.
64. Ltr, Griffis to Wall, 21 Jun 82, sub: Ramon Airbase Completion; Memo, Wall for Maj Gen Ames Albrow, 7 Jul 82, IABPC, 83/1.

65. "Mideast Beat," *World Press Review* 29 (June 1982): 15; *Newsview*, 9 Mar 82, p. 6; Sachar, *Egypt and Israel*, p. 305; *Ba'mahane*, 10 Mar 82.

66. *Jerusalem Post*, 19 Mar 82; Memo, Amick (Routing and Transmittal slip) for Wall, 21 Mar 82, sub: *Jerusalem Post* ad—19 Mar. 1982, IABPC, 41/5; Ltr, Wall to Maj Gen Wilson, 24 Mar 82, sub: Advertisement Published in the *Jerusalem Post* Newspaper, IABPC, 41/5.

67. MFR, McNeely, 22 Apr 82, sub: Meeting with DSAA on Israeli Air Base Program; "Worth Noting" [United States Air Force] *Engineering and Services Quarterly* 23 (Summer 1982): 18.

68. Hartung interview, May 82; McNeely interview, Mar 84.

69. Bar-Tov interview, May 82; Bar-Tov, Open Letter "To My American Friends in the Negev Air Base Program," Jul 81, IABPC, 75/4. The author was at the party in the Palace Hotel on 30 April 1981.

70. Bar-Tov interview, May 81; Wall interview, Aug 80.

71. MFR, Moore, 22 Apr 82, sub: FONECON with Chief of Engineers, LTG Bratton, IABPC, 41/13; Memo, Wall for the Ambassador, 14 May 82, sub: Israeli Air Base Program Site Visits and IOC Ceremony—17 May 1982, IABPC, 41/13.

72. OAO, Master Diary, 1 Apr 82; Ltr, Griffis to Wall, 21 Jun 82, sub: Ramon Airbase Completion, IABPC, 83/1.

73. Procedures for Program Conclusion, draft, n.d., attached to Memo, Walter B. Ligon, Acting Director, DSAA, for the Deputy Assistant Secretary of the Air Force (Installations), sub: Israeli Air Base Program, 15 Jun 82, IABPC, 82/5; Hartung and Bar-Tov, Procedures for Program Conclusion, 22 Jun 82, IABPC, 82/5.

74. Procedures for Program Conclusion, draft, n.d., attached to Memo, Ligon for DASAF(I), 15 Jun 82; Ltr, Wall to Hartung, 23 Jun 82, IABPC, 82/5; Ltr, Moore to Hartung, 30 Jun 82, sub: Open Issues Discussed 28–30 June 1982, IABPC, 82/5; MFR, Damico, sub: Information Provided by General Hartung and General Bar-Tov to the Undersigned on 30 June 1982, IABPC, 82/5.

75. Ltr, Griffis to Wall, 21 Jun 82, sub: Ramon Airbase Completion; OAO, Master Diary, 8 Jul 82, IABPC, 85/2; Memo, Wall, through DOD Program Manager Representative, for MOD Program Manager, 9 Jul 82, sub: Discontinuance of Pentagon Circuit, IABPC, 83/1.

76. Information Paper, Moore, 4 Aug 82, attached to MFR, Moore, sub: Support for NEPO Liaison Office—Tel Aviv, IABPC, 41/13; Ltr, Moore to Bratton, 3 Aug 82, sub: Monthly Report, Near East Project Office, IABPC, 91/2.